COTTON CHATS

FROM

DRAPER COMPANY

SHIPMAN'S
COMMON-SENSE BINDER

PATENTED

JANUARY 19, 1892. APRIL 19, 1904

To open binder, remove the slides from fasteners raise the fasteners to an erect position and then file papers. For punching: lay the papers on covers and mark sheets to correspond with fasteners.

If DUPLICATE is wanted ORDER 25981

ASA L. SHIPMAN'S SONS
MANUFACTURERS,
NEW YORK.

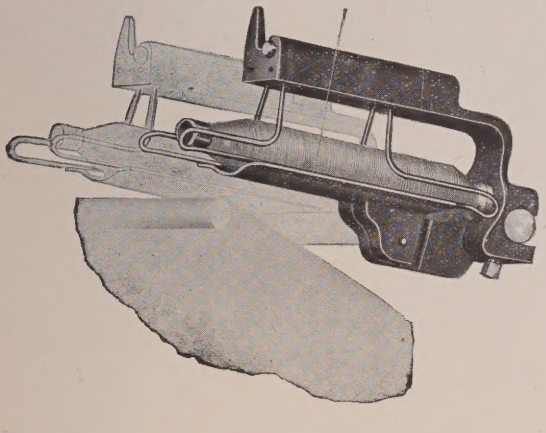
COTTON CHATS

By the Secretary of the
DRAPER COMPANY,
HOPEDALE, MASS.

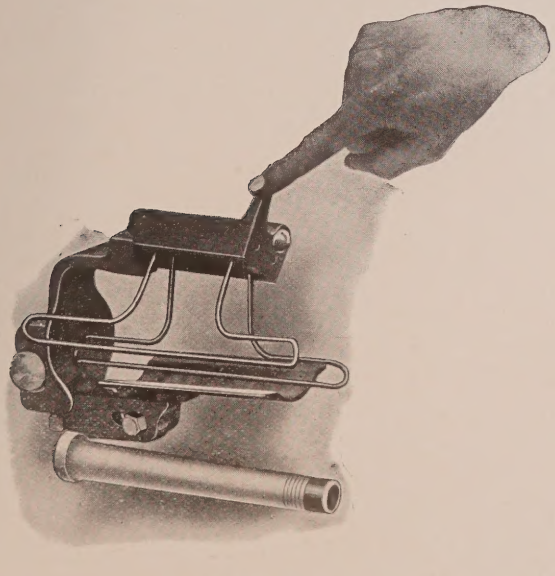
No. 21. NOVEMBER, 1903.

NEW SPOOLING DEVICES.

We have been endeavoring for years to secure some radical improvement in the method of spooling cotton yarn. After continued experiments and the abandonment of many intermediate mechanisms, we present the following invention with considerable confidence.

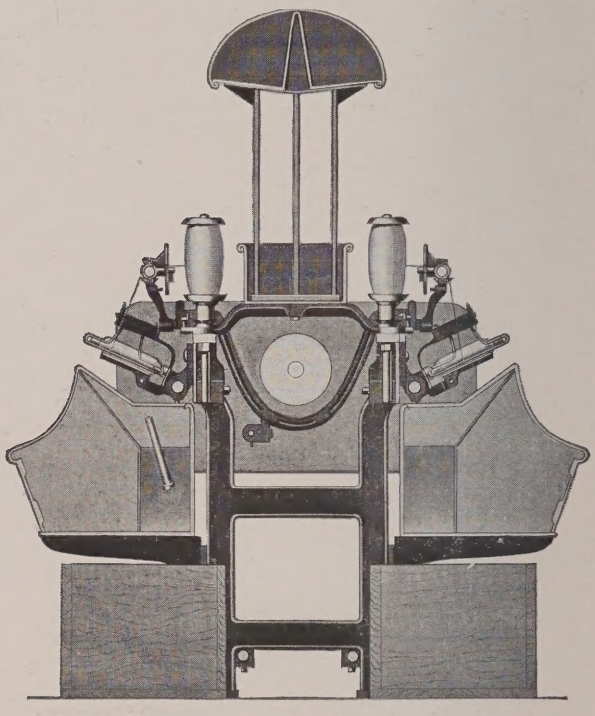


OUR NEW RHOADES BOBBIN HOLDER.



SHOWING OPERATION BY FINGER TO EJECT EMPTY BOBBIN AT SIDE.

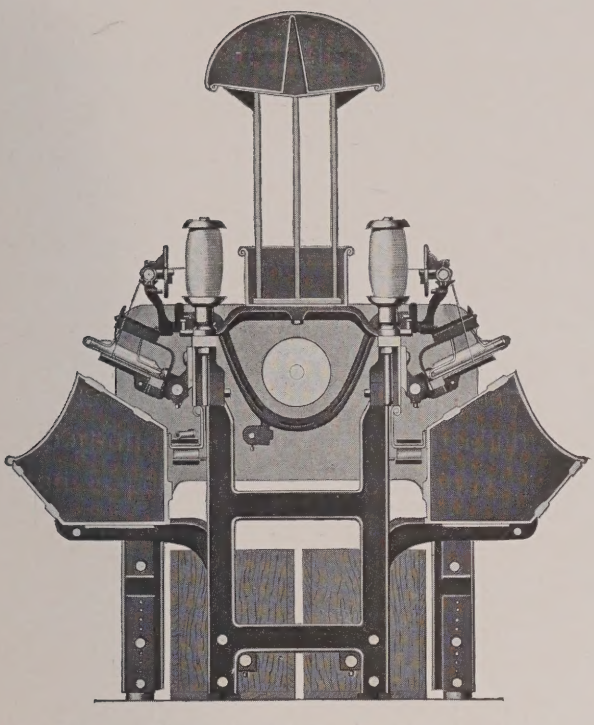
A spooler-tender is occupied in tying knots, replacing empty bobbins and in taking off spools. Also in sorting out empty bobbins for the doffer. Knot-tying has been simplified by use of automatic mechanisms. The taking off of spools cannot well be dispensed with. To replace an empty bobbin it must first be taken out of the holder. The Rhoades holder allows this to be done by an imperceptible motion of the hand, requiring little if any waste of time. The empty bobbins fall into boxes or on belts that carry them to boxes, as preferred.



BOBBIN CHUTE SPOOLER.

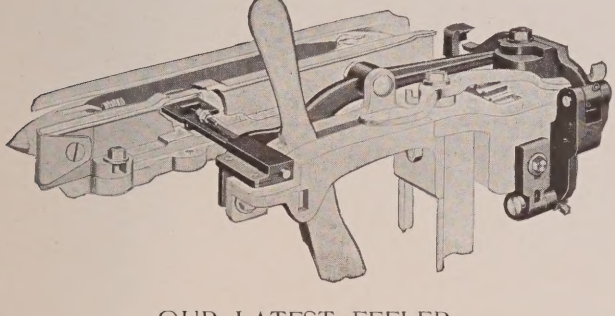
Our designer, Mr. Rhoades, has built two entirely new models of spooler to go with his new bobbin holder. They incorporate all the novelties in construction which our experience can approve of. The traverse motion for the guides is peculiarly fitted to spooling as the rod arms rock on bearings and thus keep the yarn moving constantly over the guiding surface preventing wear in ridges. There are no lifting rods to stick. With the bobbin chute pattern the empty bobbins are gathered in removable boxes which can be directly emptied into the doffer boxes.

In the travelling belt pattern a novelty is present in the use of two narrow belts and two collecting boxes, thus keeping the bobbins of each spooler-tender separated. This overcomes one of the most pertinent objections to the belt spooler of the past.



TRAVELLING BELT SPOOLER FOR USE WITH NEW BOBBIN-HOLDER.

Spooling is an operation in which the labor cost is very large in proportion to the price of the mechanism on which the operation is performed. Labor-saving devices should therefore receive careful consideration.



OUR LATEST FEELER.

Sometimes we adopt new devices after most careful trial, get our manufacturing departments all equipped to deliver them and then find a new idea that displaces them before their introduction has fairly started. In such instances, we do not hesitate to discard patterns promptly and change over to the new idea. The feeler shown above thus replaces our former device as it is fully as efficient and much more simple in character. Like our other recent form it adapts itself to changes in the throw of the lay or the position of the front box plate. Feeler devices are necessary when weaving without mis-picks on automatic looms. They

actually "feel" of the filling in the shuttle to determine when its volume is nearly exhausted and thus cause replenishment before the chance for a mis-pick occurs. In this way absolutely perfect goods can be woven, especially if the loom is arranged to stop if the filling breaks so that the weaver can "find the pick" by hand at that time. Breakage of filling is so infrequent that some customers with feeler looms set their looms to change filling when it happens.

The cloth which we intend to weave on our looms may be roughly divided into three classes:

First, goods on which mis-picks are not important, and on which thick and thin places are also of little moment. These are woven with ease by our regular Northrop loom, of which we have installed at least 75,000 to date.

Second, a class of goods on which mis-picks are considered important, and for which we apply the feeler device.

Third, a class of goods on which mis-picks are not important. but on which thick and thin places are not desired. For these we apply our recent double fork system, which is already working with great satisfaction on hundreds of looms. The double fork detects the absence of filling on either side of the cloth, and prevents the take-up from moving if filling is not present. The double fork will also take care of another evil, namely: the dragging of a broken end of filling from the shuttle, which sometimes holds the fork up on one side if the yarn is coarse. We believe that the double fork will eventually be used by all of our new looms which weave print cloth, sheeting and coarse goods of any character. It adds so little mechanism that it is a desirable safe-guard in any event.

Anyone who will carefully examine a cut of print cloth made in the usual mill on the usual loom, will find on examination that it is not uniform in character, thick and thin places being frequent and noticeable. Cuts of cloth can be woven with our double fork loom that are absolutely without variation in this respect, so far as the eye can determine.

Even with one fork, there are difficulties occurring when the fork tines get bent, or the lay gets loose in its bearings and moves sideways so that the tines of the fork strike the bars of the fork grid. We are endeavoring to overcome both of these difficulties by improving the construction of the fork itself so that the tines will always be rigidly held and properly positioned. Also by devices which will co-operate with the lay to ensure the proper co-operation of the fork with the grid at all times.